2122

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Docket No.: APBI-P08-317
(PATENT)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:
Crabtree et al

Application No.: 10/054712

Group Art Unit: 2122

Filed: November 13, 2001

Examiner: Not Yet Assigned

For: REGULATED APOPTOSIS

INFORMATION DISCLOSURE STATEMENT (IDS)

Commissioner for Patents
Washington, DC 20231

Pursuant to 37 CFR 1.56, the attention of the Patent and Trademark Office is hereby directed to the references listed on the attached PTO/SB/08. It is respectfully requested that the information be expressly considered during the prosecution of this application, and that the references be made of record therein and appear among the "References Cited" on any patent to issue therefrom.

This Information Disclosure Statement is filed before the mailing date of a first Office Action on the merits as far as is known to the undersigned.

In accordance with 37 C.F.R. 1.98(d), copies of those patent(s) or publication(s) listed on the attached Form PTO/SB/08 are not supplied because they were previously cited by or submitted to the Office in prior application no. 09/302,629 filed April 30, 1999, now US 6,316,418, which is relied upon in this application for an earlier filing date under 35 U.S.C. 120.

While the information and references disclosed in this Information Disclosure Statement may be "material" pursuant to 37 CFR 1.56, it is not intended to constitute an admission that any patent, publication or other information referred to therein is "prior art" for this invention unless specifically designated as such.

In accordance with 37 CFR 1.97(g), the filing of this Information Disclosure Statement shall not be construed to mean that a search has been made or that no other material information as defined in 37 CFR 1.56(a) exists. Applicants further reserve the right to take appropriate action to establish the patentability of the disclosed invention over the listed documents should one or more of the documents be applied against the claims of the current application.

The Commissioner is hereby authorized to charge any deficiency in the fees filed, asserted to be filed or which should have been filed herewith (or with any paper hereafter filed in this application by this firm) to our Deposit Account No. 18-1945, under Order No. APBI-P08-317.

Dated: 5/16/03

Respectfully submitted,

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Application Number	10/054712
Filing Date	November 13, 2001
First Named Inventor	Gerald R. Crabtree
Art Unit	2122
Examiner Name	Not Yet Assigned
Attorney Docket Number	APBI-P08-317

U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No.[1]	Document Number: Number-Kind Code[2] (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	AA	5,171,671	05-15-1994	Evans et al.	
	AB	6,054,436	04-25-2000	Crabtree et al.	

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No.[1]	Foreign Patent Document: Country Code[3]-Number[4]-Kind Code[5] (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T[6]
	AC	EP 0 594 847	05-04-1994	Tonen Corp.		
	AD	WO 92/01052	01-23-1992	Tonen Corp.		
	AE	WO 93/23550	11-25-1993	Genentech, Inc.		
	AF	WO 93/25533	12-23-1993	Abbott Labs		

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant

[1] Applicant's unique citation designation number (optional). [2] See attached Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. [3] Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). [4] For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the application number of the patent document. [5] Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. [6] Applicant is to place a check mark here if English language Translation is attached.

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No.[1]	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T[2]
	AG	Alberg, D.G and Schreiber, S.L. Structure-Based Design of a Cyclophilin-Calcineurin Bridging Ligand. *Science* 262, 248-250 (1993).	
	AH	Albers, M.W. et al. Substrate Specificity for the Human Rotamase FKBP: A View of FK506 and Rapamycin as Leucine (twisted amide)-Proline Mimics. *J. Org. Chem.* 55, 4984-4986 (1990).	
	AI	Albers, M.W. et al. Relationship of FKBP to PKCI-1. *Nature* 351, 527 (1991).	
	AJ	Albers, M.W. et al. FKBP, Thought to be Identical to PKCI-2, Does Not Inhibit Protein Kinase C. *BioMed. Chem. Lett.* 1, 205-210 (1991).	
	AK	Albers, M.W. et al. An FKBP-Rapamycin Sensitive, Cyclin-Dependent Kinase Activity That Correlates with the FKBP Rapamycin-Induced G1 Arrest Point In MG-63 Cells. *Annals of N. Y. Acad. Sci.* 696, 54-62 (1993).	
	AL	Andrus, M.B. and Schreiber, S.L. Structure-Based Design of an Acyclic Ligand That Bridges FKBP12 and Calcineurin. *J. Am. Chem. Soc.* 115, 10420-10421 (1993).	
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	AN	Bergsma, D.J. et al. The Cyclophilin Multigene Family of Peptidyl-Prolyl Isomerases. *J. Biol. Chem.* 266, 23204-23214 (1991).
	AO	Bernard, O. et al. High-affinity Interleukin-2 Binding by an Oncogenic Hybrid Interleukin-2 Epidermal Growth Factor Receptor Molecule. *PNAS* 84, 2125-2129 (1987).
	AP	Bierer, B.E. et al. Mechanisms of Immunosuppression by FK506: Preservation of T Cell Transmembrane Signal Transduction. *Transplantation* 49, 1168-1202 (1990).
	AQ	Bierer, B.E. et al. Probing Immunosuppressant Action with a Nonnatural Immunosuppressive Ligand. *Science* 250, 556-559 (26 Oct. 1990).
	AR	Bierer, B.E. et al. Two Distinct Signal Transmission Pathways in T Lymphocytes are Inhibited by Complexes Formed Between an Immunophilin and Either FK506 or Rapamycin. *PNAS* 87, 9231-9235 (Dec. 1990).
	AS	Bierer, B.E. et al. The Effect of the Immunosuppressant FK506 on Alternate Pathways of T Cell Activation. *Eur. J. Immunol.* 21, 439-445 (1991).
	AT	Bonnerot, C. et al. Role of associated γ-chain in Tyrosine Kinase Activation via Murine FcRIII. *EMBO J.* 11, 2747-2757 (1992).
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	AV	Byrn, R.A. et al. Biological Properties of a CD4 Immunoadhesin. *Nature* 344, 667-670 (12 April 1990).
	AW	Cantley, L.C. et al. Oncogenes and signal transduction. *Cell* 64, 281-302 (25 Jan. 1991).
	AX	Chan, A.C. et al. The ζ Chain is associated with a Tyrosine Kinase and upon T-Cell Antigen Receptor Stimulation Associates with ZAP-70, a 70-kDa Tyrosine Phosphoprotein. *PNAS* 88, 9166-9170 (Oct. 1991).
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	AZ	Clark, M.R. et al. The B Cell Antigen Receptor Complex: Association of Ig-α and Ig-β with Distinct Cytoplasmic Effectors. *Science* 258, 123-126 (2 Oct. 1992).
	BA	Clipstone, N.A. et al. Calcineurin: Molecular analysis of its interaction with drug-immunophilin complexes and its role in the regulation of NF-AT. *J. Cell. Biochem. Suppl.* 0 (18B) 274, Abstract #I410 (1994).
	BB	Crabtree, G. R. IL-2 receptor in the pathogenesis of human lymphoma. Abstract of NIH Grant 5R01CA039612-03 (1987).
	BC	Crabtree, G. R. Pathways of T lymphocyte activation. Abstract of NIH Grant 2R01CA039612-07 (1991).

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Examiner Name	Not Yet Assigned
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	BD	DiLella, A.G. et al. Chromosomal Band Assignments of the Genes Encoding Human FKBP12 and FKBP13. *Biochem. Biophys. Res. Commun.* 189, 819-823 (15 Dec. 1992).
	BE	Donald, D.K. et al. C10 N-Acyl Modified FK-506: A Possible Hybrid Analogue of the Transition State of Petidyl-Prolyl Cis-Trans Isomerization. *Tetrahedron Letters* 31, 1375-1378 (1991).
	BF	Durand, D.B et al. Characterization of Antigen Receptor Response Elements within the Interleukin-2 Enhancer. *Mol. Cell. Biol.* 8, 1715-1724 (April 1988).
	BG	Eberle, M.K. and Nuninger, F. Synthesis of the Main Metabolite (OL-17) of Cyclosporin A. *J. Org. Chem.* 57, 2689-2691 (1992).
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	BI	Eiseman, E. and Bolen, J.B. Signal Transduction by the Cytoplasmic Domains of FcεRI-γ and TCRζ0J-γ in Rat Basophilic Leukemia Cells. *J. Biol. Chem.* 267, 21027-21032 (15 Oct. 1992).
	BJ	Emmel, E.A. et al. Cyclosporin A Specifically Inhibits Function of Nuclear Proteins Involved in T-Cell Activation. *Science* 246, 1617-1620 (22 Dec. 1989).
	BK	Engel, I. et al. High-Efficiency Expression and Solubization of Functional T-Cell antigen Receptor Heterodimers. *Science* 256, 1318-1321 (29 May 1992).
	BL	Evans, D.A. et al. Mechanistic Study of the Rhodium(I)- and Iridium(I)- Catalyzed Hydroboration Reactions: Scope and Synthetic Applications. *J. Am. Chem. Soc.* 114, 6671-6679 (1992).
	BM	Evans et al. Mechanistic study of the rhodium(I)-catalyzed hydroboration reaction. J. Am. Chem. Soc. 114, 6679-6685 (1992).
	BN	Fields, S. & Song, O-k.. A Novel Genetic System to Detect Protein-Protein Interactions. *Nature* 340, 245-246 (20 July 1989).
	BO	Fischer, G. et al. Mip protein of Legionella pneumophila exhibits peptidyl-prolyl-cis/trans isomerase (Pplase) activity. *Mol. Microbiol.* 6, 1375-1383 (1992).
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	BQ	Flanagan, W.M. et al. Nuclear Association of a T-Cell Transcription Factor Blocked by a Tyrosine Factor Blocked by FK-506 and Cyclosporin A. *Nature* 352, 803-807 (29 Aug. 1991).
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First Named Inventor	Gerald R. Crabtree
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	BU	Fretz, H. et al. Rapamycin and FK506 Binding Proteins (Immunophilins). *J. Am. Chem. Soc.* 113, 1409-1411 (1991).
	BV	Friedman, J. & Weissman, I. Two Cytoplasmic Candidates for Immunophilin Action are Revealed by Affinity for a New Cyclophilin: One in the Presence and One in the Presence and One in the Absence of CsA. *Cell* 66, 799-806 (23 Aug. 1991).
	BW	Fuh, G. et al. Rational design of potent antagonists to the human growth hormone receptor. *Science* 256, 1677-1680 (19 June 1992).
	BX	Galat, A. et al. A Rapamycin-Selective 25 kDa Immunophilin. *Biochemistry* 31, 2427-2434 (1992).
	BY	Ghosh, A.K. et al. N,N'-Disuccinimidyl Carbonate: A Useful Reagent for Alkoxycarbonylation of Amines. *Tetrahedron Letters* 33, 2781-2784 (1992).
	BZ	Gottschalk, W.K. et al. The Carboxy Terminal 100 Amino Acid Portion of the Insulin Receptor is Important for Isulin Signaling to Pyruvate Dehydrogenase. *Biochem. Biophys. Res. Comm.* 189, 906-911 (15 Dec. 1992).
	CA	Haendler, B. et al. Complementary DNA for human T-cell cyclophilin. *EMBO J.* 6, 947-950 (1987).
	CB	Haendler, B. et al. Yeast cyclophilin: isolation and characterization of the protein, cDNA and gene. *Gene* 83, 39-46 (1989).
	CC	Harding, M.W. et al. A Receptor for the Immunosuppressant FK506 is a cis-trans Peptidyl-Prolyl Isomerase. *Nature* 341, 758-760 (1989).
	CD	Herbst, R. et al. Substrate Phosphorylation Specificity of the Human c-kit Receptor Tyrosine Kinase. *J. Biol. Chem.* 266, 19908-19916 (1991).
	CE	Howard, F.D. et al. The CD3ζCytoplasmic Domain Mediates CD2-Induced T Cell Activation. *J. Exp. Med.* 176, 139-145 (1992).
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	CJ	Irving, B.A. & Weiss, A. The Cytoplasmic Domain of the T Cell Receptor ç Chain is Sufficient to Couple to Receptor-Associated Signal Transduction Pathways. *Cell* 64, 891-901 (8 March 1991).	
	CK	Ishizaka-Ikeda, E. et al. Signal transduction mediated by growth hormone receptor and its chimeric molecules with the granulocyte colony-stimulating factor receptor. PNAS 90, 123-127 (1993).	
	CL	Itoh, N. & Nagata, S. A Novel Protein Domain Required for Apoptosis. *J. B. C.* 268, 10932-10937 (25 May 1993).	
	CM	Itoh, N. et al. Effect of bcl-2 on Fas Antigen Mediated Cell Death. *J. Immunol.* 151, 621-627 (1993).	
	CN	Jin, Y.-J. et al. Molecular cloning of a membrane-associated human FK506- and rapamycin-binding protein, FKBP-13. *PNAS* 88, 6677-6681 (Aug. 1991).	
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	CP	Kaye, R.E. et al. Effects of Cyclosporin A and FK506 on Fce Receptor type I-Initiated Increases in Cytokine mRNA in Mouse Bone Marrow-Derived Progenito Mast Cells: Resistance to FK506 is Associated with a Deficiency in FKBP12. *PNAS* 89, 8542-8546 (Sept. 1992).	
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	CR	Kinet, J.-P. Antibody-Cell Interactions: Fc Receptors. *Cell* 57, 351-354 (5 May 1989).	
	CS	Krishnamurthy, S. Lithium Tris[(3-ethyl-3-pentyl)oxy]aluminum Hydride. A New Remarkably Chemoselective Reagent for the Reduction of Aldehydes in the Presence of Ketones. *J. Org. Chem.* 46, 4628-4629 (1981).	
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	CU	Lammers et al. Differential Signaling Potential in Insulin- and IGF-1-receptor Cytoplasmic Domains. *EMBO J.* 8, 1369-1375 (1989).	
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	CY	Lee, J. et al. HER2 Cytoplasmic Domain Generates Normal Mitogenic and Transforming Signals in a Chimeric Receptor. *EMBO J.* 8, 167-173 (1989).	
	CZ	Lee, A. W.-m. and Neinhuis, A.W. Functional Dissection of Structural Domains in the Receptor for Colony Stimulating Factor-1. *J. Biol. Chem.* 267, 16472-16483 (1992).	
	DA	Lehtola et al. Receptor Downregulation and DNA Synthesis are Modulated by EGF and TPA in Cells Expressing an EGF/neu Chimera. *Growth Factors* 1, 323-334 (1989).	
	DB	Lehtola et al. A chimeric EGFR/neu receptor in functional analysis of theneu oncoprotein. *Acta Oncologia* 31, 147-150 (1992).	
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	DE	Letourneur, F. et al. T-cell and basophil activation through the cytoplasmic tail of T-cell-receptor zeta family proteins. PNAS 88, 8905-8909 (1991).	
	DF	Letourneur & Klausner. Activation of T Cells by a Tyrosine Kinase Activation Domain in the Cytoplasmic Tail of CD3 ∈. *Science* 255, 79-82 (1992).	
	DG	Lev et al. Receptor functions and ligand-dependent transforming potential of a chimeric kit proto-oncogene. *Mol. Cell. Biol.* 10, 6064-6068 (1990).	
	DH	Lev et al. A Specific Combination of Substrates is Involved in Signal Transduction by the kit-Encoded Receptor. *EMBO J.* 10, 647-654 (1991).	
	DI	Liu et al. Cloning, expression, and purification of human cyclophilin in Escherichia coli and assessment of the catalytic role of cysteines by site-directed mutagenesis. *PNAS* 87, 2304 (1990).	
	DJ	Liu et al. Calcineurin is a Common Target of Cyclophilin-Cyclosporin A and FKBP-FK506 Complexes. *Cell* 66, 807 (1991).	
	DK	Liu et al. Inhibition of T Cell Signaling by Immunophilin-Ligand Complexes Correlates With Loss of Calcineurin Phosphatase Activity. *Biochemistry* 31, 3896-3901 (1992).	
	DL	Liu. FK506 and cyclosporin, molecular probes for studying intracellular signal transduction. *Immunology Today* 14, 290 (1993).	
	DM	Maki, N. et al. Complementary DNA encoding the human T-cell FK506-binding protein, a peptidylprolyl cis-trans isomerase distinct from cyclophilin. *PNAS* 87, 5440-5443 (July 1990).	
	DN	Mares et al. A Chimera between Platelet-Derived Growth Factor B-receptor and Fibroblast Growth Factor Receptor-1 Stimulates Pancreatic β-DNA Synthesis in the Presence of PDGF-BB. *Growth Factors* 6, 93-101 (1992).	

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	DP	Mattila et al. The Actions of Cyclosporin A and FK506 Suggest A Novel Step in the Activation of T Lymphocytes. *EMBO J.* 9, 4425-4433 (1990).	
	DQ	Meyer et al. Synthetic Investigations of Rapamycin. 1. Synthesis of a C10-C21 Fragment. *J. Org. Chem.* 57, 5058-5060 (1992).	
	DR	Michnick et al. Solution Structure of FKBP, a Rotamese Enzyme and Receptor for FK506 and Rapamycin. *Science* 252, 836-839 (1991).	
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	DX	Patchett et al. Analogs of Cyclosporin A Modified at the D-ALA[8] Position. *J. Antibiotics* 45, 94-102 (1992).	
	DY	Peles et al. Regulated Coupling of the Neu Receptor to Phosphatidylinositol. *J. Biol. Chem.* 267, 12266-12274 (1992).	
	DZ	Price et al. Human cyclophilin B: A second cyclophilin gene encodes a peptidyl-prolyl isomerase with a signal sequence. *PNAS* 88, 1903 (1991).	
	EA	Ptashne et al. Activators and Targets. *Nature* 346, 329-331 (1990).	
	EB	Ragan et al. Studies of the Immunosuppressive Agent FK506: Synthesis of an Advanced Intermediate. *J. Org. Chem.* 54, 4267-4268 (1989).	
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	ED	Riedel et al. Cytoplasmic Domains Determine Signal Specificity, Cellular Routing Characteristics and Influence Ligand Binding of Epidermal Growth Factor and Insulin Receptors. *EMBO J.* 8, 2943-2954 (1989).	
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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Sheet 8 of 11

Complete if Known	
Application Number	10/054712
Filing Date	November 13, 2001
First Named Inventor	Gerald R. Crabtree
Art Unit	2122
Examiner Name	Not Yet Assigned
Attorney Docket Number	APBI-P08-317

	EF	Romo et al. Synthetic Investigations of Rapamycin. 2. Synthesis of a C22-C42 Fragment. *J. Org. Chem.* 57, 5060-5063 (1992).
	EG	Romo et al. Total Synthesis of Rapamycin Using an Evans-Tischenko Fragment Coupling. *J. Am. Chem. Soc.* 115, 7906-7907 (1993).
	EH	Rosen et al. Inhibition of FKBP Rotamase Activity by Immunosuppressant FK506: A Twisted Amide Surrogate. *Science* 248, 863 (1990).
	EI	Rosen et al. Proton and Nitrogen Sequential Assignments and Secondary Structure Determination of the Human FK506 and Rapamycin Binding Protein. *Biochemistry* 30, 4774-4789 (1991).
	EJ	Rosen et al. Study of Receptor-Ligand Interactions Through Receptor Labeling and Isotope-Edited NMR. *J. Org. Chem.* 56, 6262 (1991).
	EK	Rosen et al. Natural Products as Probes of Cellular Function: Studies of Immunophilins. *Angew. Chemie. Int. Ed. Eng.* 31, 384-400 (1992).
	EL	Rosen et al. Activation of an Inactive Immunophilin by Mutagenesis. *J. Am. Chem. Soc.* 115, 821-822 (1993).
	EM	Rosen, M.K. The molecular basis of receptor-ligand-receptor interactions: Studies of the immunophilin FKBP12. Abstract of Doctoral Thesis (1993).
	EN	Roussel et al. Antibody-Induced Mitogenicity Mediated by a Chimeric CD2-c-fms Receptor. *Mol. Cell. Biol.* 10, 2407-2412 (1990).
	EO	Rudert et al. Apoptosis in L929 cells expressing a CD40/Fas chimeric receptor: Dissociation of stimulatory from inhibory death signaling functions. *Biochem. Biophys. Res. Comm.* 204, 1102 (1994).
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	EQ	Schreiber, S. L. Synthesis of materials with physiological properties. Abstract of NIH Grant R37GM38627, (1987).
	ER	Schreiber et al. Is There a Scaffolding Domain within the Structure of the Immunosuppressive Agent Cyclosporin A (CsA)? Studies of the Cyclophilin Binding Domain of CsA. *Tetrahedron Lett.* 29, 6577 (1988).
	ES	Schreiber, S. L. Analysis of cyclosporin-receptor interaction: Synthesis of semi-peptide and non-peptide analogs of cyclosporin A. Abstract of NIH Grant P01GM406600001 (1989).
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	EU	Schreiber et al. Protein Overproduction for Organic Chemists. Tetrahedron 47, 2543-2562 (1991).	
	EV	Schreiber et al. Immunophilin-Ligand Complexes as Probes of Intracellular Signaling Pathways. *Transplantation Proceedings* 23, 2839 (1991).	
	EW	Schreiber, S. L. Chemistry and Biology of the Immunophilins and their Immunosuppressive Ligands. *Science* 251, 283 (1991).	
	EX	Schreiber, S. L. Synthesis of materials with physiological properties. Abstract of NIH Grant R37GM38627, (1992).	
	EY	Schreiber et al. Molecular Recognition of Immunophilins and Immunophilin-Ligand Complexes. *Tetrahedron* 48, 2545-2558 (1992).	
	EZ	Schreiber et al. The Mechanism of Action of Cyclosporin A and FK506. *Immunology Today* 13, 136-142 (1992).	
	FA	Schreiber, S. L. Immunophilin-Sensitive Phosphatase Action in Cell Signaling Pathways. *Cell* 70, 365-369-8 (1992).	
	FB	Schultz et al. Atomic Structure of the Immunophilin FKBP13-FK506 Complex: Insights Into the Composite Binding Surface for Calcineurin. *J. Am. Chem. Soc.* 116, 3129-3130 (1994).	
	FC	Seedorf et al. Analysis of platelet-derived growth factor receptor domain function using a novel chimeric receptor approach. *J. Biol. Chem.* 266, 12424-12431 (1991).	
	FD	Seedorf et al. Differential effects of carboxy-terminal sequence deletions on platelet-derived growth factor receptor signaling activities and interactions with cellular substrates. *Mol. Cell. Biol.* 12, 4347-4356 (1992).	
	FE	Selvakumaran et al. Myeloblastic leukemia cells conditionally blocked Myc-estrogen receptor chimeric transgenes for terminal differentiation coupled to growth arrest and apoptosis. *Blood* 81, 2257 (1993).	
	FF	Serafini et al. Selection and characterization of mutants in a signal transduction/transmission pathway. *J. Cell. Biochem. Suppl.* 0 (6 Part A), 89, Abstract #B234 (1992).	
	FG	Shaw et al. Identification of a Putative Regulator of Early T Cell Activation Genes. *Science* 241, 202 (1988).	
	FH	Sistonen et al. Activation of the neu Tyrosine Kinase Induces the fos/jun Transcription Factor Complex, the Glucose Transporter, and Ornithine Decarbodylase. *J. Cell. Biol.* 109, 1911-1919 (1989).	
	FI	Smith et al. FKBP54, a Novel FK506 Binding Protein in Avian Progesterone Receptor Complexes and HeLa Extracts. *J. Biol. Chem.* 268, 24270-24273 (1993).	
	FJ	Somers et al. Synthesis and Analysis of 506BD, a High Affinity Ligand to the Immunophilin, FKBP. *J. Am. Chem. Soc.* 113, 8045-8056 (1991).	

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	FK	Standaert et al. Molecular cloning and overexpression of the human FK506-binding protein FKBP. *Nature* 346, 671 (1990).	
	FL	Standaert, R.F. Biochemical and structural studies of the FK506- and rapamycin-binding proteins (FKBPs). Abstract of Doctoral Thesis (1992).	
	FM	Tai et al. Association of a 59-Kilodalton Immunophilin with the Glucocorticoid Receptor Complex. *Science* 256, 1315-1318 (1992).	
	FN	Tai et al. P59 (FK506 Binding Protein 59) Interaction with Heat Shock Proteins is Highly Conserved and May Involve Proteins Other Than Steroid Receptors. *Biochemistry* 32, 8842-8847 (1993).	
	FO	Tanida et al. Yeast Cyclophilin-related gene encodes a nonessential second peptidyl-prolyl cis-trans isomerase with the secretory pathway. *Transplantation Proceedings* 23, 2856 (1991).	
	FP	Traber et al. Cyclosporins – New Analogues by Precursor Directed Biosynthesis. *J. Antibiotics* 42, 591-597 (1989).	
	FQ	Ullman et al. Site of action of cyclosporin and FK506 in the pathways of communication between the T-lymphocyte antigen receptor and the early activation genes. *Transplant. Proceed.* 23, 2845 (1991).	
	FR	Van Duyne et al. Atomic Structure of the Rapamycin human immunophilin FKBP-12 complex. *J. Am. Chem. Soc.* 113, 7433 (1991).	
	FS	Van Duyne et al. Atomic Structure of FKBP-FK506, an Immunophilin-Immunosuppressant Complex. *Science* 252, 839-842 (1991).	
	FT	Van Duyne et al. Atomic Structures of the Human Immunophilin FKBP12 Complexes with FK506- and Rapamycin. *J. Mol. Biol.* 229, 105-124 (1993).	
	FU	VanRheenen et al. An Improved Catalytic OsO_4 Oxidation of the Olefins to Cis-1,2 Glycols Using Tertiary Amine Oxides as the Oxidant. *Tetrahedron Letters* 23, 1973-1976 (1976).	
	FV	Venkitaraman et al. Interleukin 7 receptor functions by recruiting the tyrosine kinase $p59^{fyn}$ through a segment of its cytoplasmic tail. *PNAS* 89, 12083-12087 (1992).	
	FW	Verweij et al. Cell Type Specificity and Activation Requirements for NFAT-1 (Nuclear Factor of Activated T-Cells) Transcriptional Activity Determined by a New Method Using Transgenic Mice to Assay Transcriptional Activity of an Individual Nuclear Factor. *J. Biol. Chem.* 265, 15788 (1990).	
	FX	Walsh et al. Cyclosporin A, the Cyclophilin Class of Peptidylprolyl Isomerases, and Blockade of T Cell Signal Transduction. *J. Biol. Chem.* 267, 13115 (1992).	
	FY	Wandless et al. FK506 and Rapamycin Binding to FKBP: Common Elements Involved in Immunophilin-Ligand Complexation. *J. Am. Chem. Soc.* 113, 2339-2341 (1991).	

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	FZ	Wandless, T.J. Turning genes on and off using FKBP and FK506. Doctoral Thesis (1993).	
	GA	Watanabe-Fukunga et al. Lymphoproliferation Disorder in Mice Explained by Defects in Fas Antigen that Mediates Apoptosis. *Nature* 356, 314-317 (1992).	
	GB	Weissman et al. Molecular Cloning and Chromosomal Localization of the Human T-Cell Receptor ζ Chain: Distinction from the Molecular CD3 Complex. *PNAS* 85, 9709-9713 (1988).	
	GC	Wennstrom et al. The platelet-derived growth factor beta-receptor kinase insert confers specific signaling properties to a chimeric fibroblast growth factor receptor. *J. Biol. Chem.* 267, 13749-13756 (1992).	
	GD	Wittbrodt et al. The Xmrk Receptor Tyrosine Kinase is Activated in Xiphophorous Maligant Melanoma. *EMBO J.* 11, 4239-4246 (1992).	
	GE	Yang et al. A Composite FKBP12-FK506 Surface That Contacts Calcineurin. *J. Am. Chem. Soc.* 115, 819-820 (1993).	
	GF	Yarden et al. Growth factor receptor tyrosine kinases. *Ann. Rev. Biochem.* 57, 443-478 (1988).	
	GG	Zelle et al. Systematic Degradation of Zincophorin: A Stereoselective Synthesis of the C17-C25 Fragment. *J. Org. Chem.* 51, 5032-5036 (1986).	
	GH	Zhang et al. The insulin receptor-related receptor. *J. Biol. Chem.* 267, 18320-18328 (1992).	
	GI	Zydowsky et al. Active site mutants of human cyclophilin A separate peptidyl-prolyl isomerase activity from cyclosporin A binding and calcineurin inhibition. *Prot. Sci.* 1, 1092 (1992).	
	GJ	Zydowsky et al. Overexpressoin, purification, and characterization of yeast cyclophilins A and B. *Protein Sci.* 1, 961 (1992).	

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